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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,297	07/22/2004	Sven-Ingvar Lundahl	10400C-000112/US	1854

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EXAMINER

LANGDON, EVAN H

ART UNIT PAPER NUMBER

3654

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/502,297	LUNDAHL, SVEN-INGVAR	
	<b>Examiner</b>	<b>Art Unit</b>	
	Evan H. Langdon	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 December 2005 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 1, the limitation "slightly" on line 4 is indefinite.

In regards to claim 1, the limitation "each cylinder" on line 4 is indefinite. There is only one cylinder. Suggested correction: the cylinder.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

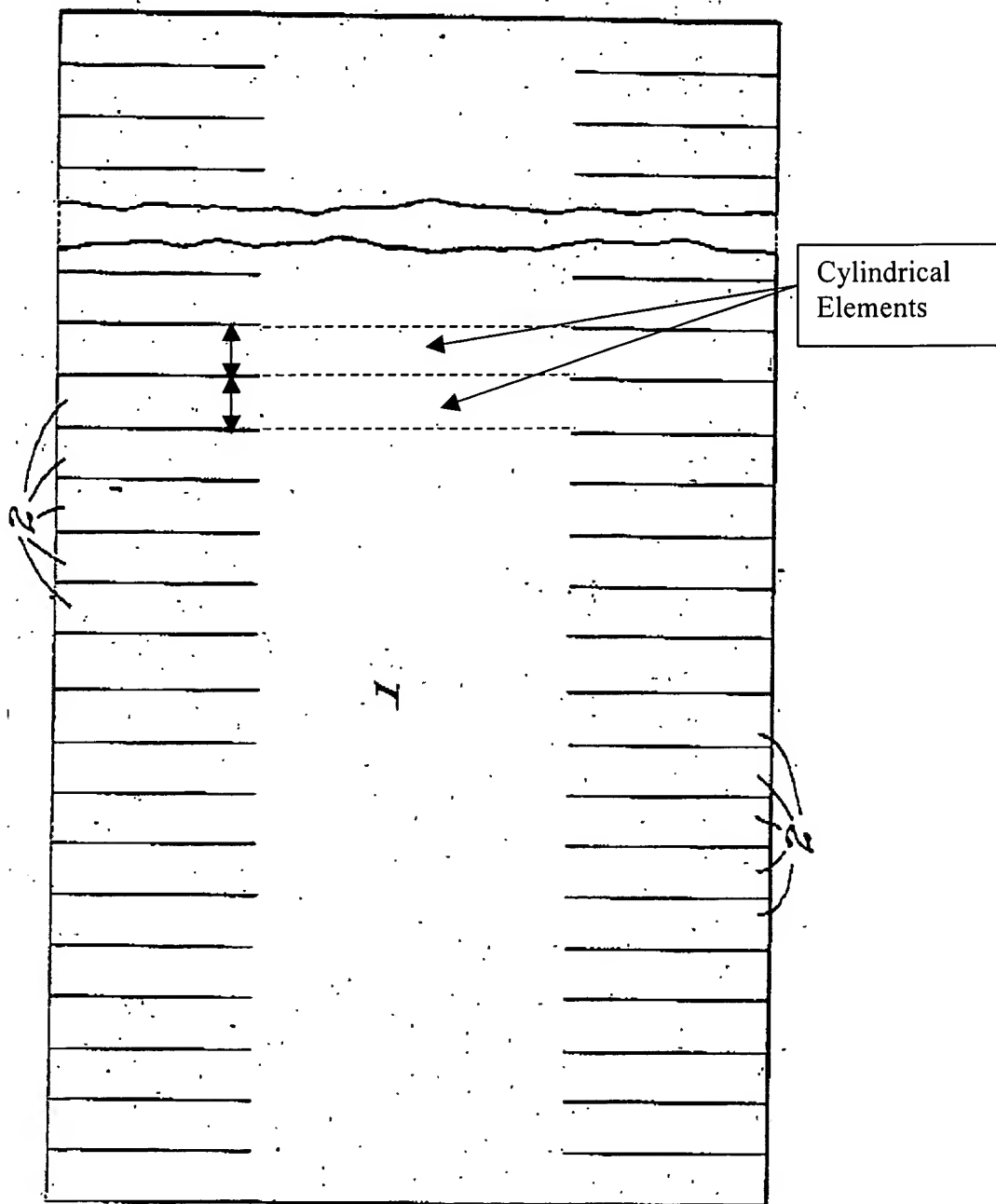
Claims 1-6 and 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balke (US 1,437,954) in view of Orange (US 5,513,819) and Zuk et al (US 5,791,590).

Balke discloses a bobbin, which has a cylinder 1 formed integrally with two circumferential end flanges 2 forming U-shaped channel; and

wherein the cylinder includes a plurality of cylinder elements each having a slightly curved, radially inner surface forming a circumference of the cylinder (see below)

each end flange 2 consists of a plurality of spaced apart radial flange elements 2 distributed along the circumference of the cylinder 1.

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Orange teaches a bobbin of plastic, which has a cylinder formed integrally with circumferential end flanges 14, 16 forming U-shaped channel and each end flange a made of one pieced of plastic (col. 2 line 39-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material of the bobbin of Balke to be made of plastic as suggested by Orange, to make the bobbin available for reuse since plastic is more durable (col. 2 line 39).

Orange discloses the claimed invention except for the plastic bobbin formed by injection molding. Zuk teaches that it is known to form a one-piece reel element made of plastic by means of injection molding because injection molding is a widely used manufacturing process appropriate for making plastic articles (col. 1, lines 34-67).

In regards to claim 2, Balke as modified by Orange and Zuk teaches the flange elements 2 (Balke) over the entire radial extent have a constant extension in the circumferential direction, the flange elements of each end flange having a total extension in the circumferential direction that is essentially equal to the circumference of the cylinder.

In regards to claims 3-5, Balke as modified by Orange and Zuk teaches a plurality of axial grooves (Fig. 2 Balke) are formed in the outer and inner circumferential surface of the cylinder, where the outer and inner circumferential grooves are located opposite of each other, each groove extending the entire length of the cylinder between a point between two adjoining flange elements of one end flange and a point between two adjoining flange elements of the other end flange.

In regards to claim 6, Balke as modified by Orange and Zuk teaches each flange element at its radially inner end has a lug 26 (Orange) which extends past the inner circumferential surface of the cylinder and has a circumferential extent that decreases radially inwards.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Balke with the lug of Orange, to connect the channels to each other because it would be easier to assemble..

It would have been obvious to perform the method steps of claims 8-12 when manufacturing the reel bobbin of Balke as modified by Orange in its usual and expected fashion.

In regards to claim 9, Balke as modified by Orange and Zuk teaches the channel ends 36, 40 are connected to each other by protrusions 38, 42 (Fig. 1A and 3, Orange).

#### ***Claim Rejections - 35 USC § 103***

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Balke as modified by Orange and Zuk, and in further view of Koskelainen (US 6,021,974).

Koskelainen teaches a reel bobbin having an articulate projection 8 connecting flanges 7 and 10.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the flanges of Balke as modified by Orange to include articulate projections as suggested by Koskelainen, to provide stability to the plastic bobbin.

#### ***Response to Arguments***

The plurality of spaced apart radial flange elements 2 defining plurality of cylinder elements as seen by the dashed lines above where each element has a slightly curved, radially inner surface forming a circumference of the cylinder as seen in Figure 2.

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*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan H. Langdon whose telephone number is (571)272-6948. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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